

## Case study: Oral postnatal contraception

### KEY PRACTICE POINT

- All clinicians involved in the care of pregnant women should provide the opportunity to discuss contraception.
- Whenever contraceptive counselling is provided, care should be taken to ensure women do not feel under pressure to choose a method of contraception.

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#### **Case Study** - *An update on options and how to safely prescribe oral postnatal contraception*

Alina, 34 yo receiving antenatal care in her 2nd pregnancy. Her first pregnancy was complicated by IUGR and she had an emergency LSCS at 39 weeks due to significantly decreased liquor volume. She subsequently experienced a DVT 1 week after delivery. Thrombophilia screening was negative.

She is now 33 weeks in this pregnancy, all is progressing well at this stage. The plan is for fetal growth and wellbeing ultrasound and obstetric review at 36 weeks and Alina has expressed the desire for a vaginal birth after caesarean (VBAC) at the hospital with early discharge. She plans to breastfeed.

#### **Question: When is it recommended to raise the topic of contraception?**

Family Planning NSW undertook a study regarding attitudes of maternal health providers to provision of postnatal contraception in 2022 and the majority felt that it was important to offer discussion about contraception during the antenatal period ie. whilst the woman was still pregnant. They felt that it was important for women to have the time to adequately consider their options and have access to patient information materials which was more likely to occur before the added stress and fatigue of childbirth and caring for a newborn.

Pregnancy spacing is now recognised as being beneficial to both mother and infants. Interpregnancy interval (IPI) is generally recommended to be 18-24 months. The Faculty of Sexual and Reproductive Healthcare (FSRH) reports that an IPI shorter than a year between delivery and a new conception is related to an increased risk of preterm delivery and small-for-gestational-age neonates.<sup>4,5</sup>

Ovulation and pregnancy can occur within weeks of delivery unless suppressed by lactation. Contraception guidelines advise women who are not fully breastfeeding to use effective contraception from 21 days post-delivery. This highlights the benefits of planning contraception before delivery so that there is not a delay in provision of a suitable option.

*This represents an important shift in thinking from the old line in the Discharge Summary "See GP at 6 weeks for check and contraception"!*

**Answer: Contraception discussion should be part of routine antenatal care.**

Alina has previously only used condoms and the Combined oral contraceptive pill (COCP) for contraception. She is interested in hearing about the long-acting reversible (LARC) methods of contraception you discuss with her but she is clear that she only wants to consider oral options at this stage.

**Answer: See [Contraception After Pregnancy Chart](#)**

Oral emergency contraception can be used for non-breastfeeding. While breastfeeding, LNG EC is suitable for use as only tiny amounts pass into breastmilk with no indication of harm. UPA EC is also suitable while breastfeeding as the risk to the infant is low. Off-label use, supported by international opinion is that users wishing to avoid the highest infant exposure can express and discard breastmilk for 24 hours after taking UPA EC.

**Question: When can the combined oral contraceptive pill be commenced after delivery?**

The post-partum period is the most thrombogenic time of a woman's life. The risk of VTE in women is two per 10 000 women/year in women, 10 cases during pregnancy, and 50 during the puerperium<sup>i</sup>. The risks of DVT/PE need to be carefully weighed up against the risk of pregnancy on an individual basis. Most thrombogenic parameters return to normal in the first 3 weeks post partum but some, like protein C and D-dimer, take up to 6 weeks.<sup>ii</sup>

It is well recognised that estrogen is pro-thrombotic. For this reason, estrogen containing combined oral contraceptive (COC) pills are not recommended for anyone before 3 weeks post-delivery.

COC is considered acceptable for use from 6 weeks postpartum, unless other contra-indications exist, such as migraine with aura. Between 3 to 6 weeks post partum, the risk of ovulation and pregnancy with any breastfeeding is very low so the risks of starting COCP early may outweigh the benefits. However, in women who are not breastfeeding, the benefit of effective contraception is likely to outweigh the small risks of VTE between 3 to 6 weeks post-partum if they are resuming sexual activity but this needs to be explained and the woman needs to make an informed choice.

All women should undergo a risk assessment for VTE postnatally. Risk factors for VTE can be additive so a detailed history including obstetric history, family history and checking BP and weight need to be part of the consultation. COC should not be used by women who have risk factors for venous thromboembolism (VTE) within 6 weeks of childbirth. These include immobility, transfusion at delivery, body mass index (BMI)  $\geq 30$  kg/m<sup>2</sup>, postpartum haemorrhage, post-caesarean delivery, pre-eclampsia or smoking. This applies to both women who are breastfeeding and not breastfeeding.

There are now COCP formulations which contain oestradiol (E2) or estetrol (E4), instead of the traditional ethinyl estradiol (EE) and there is some evidence that these types of estrogens may have less pro-thrombotic effects however there is insufficient evidence to support any change in prescribing guidelines and so all estrogen-containing contraceptive pills are considered to have the same Medical Eligibility Criteria (MEC).

**Answer: Due to the risk of VTE, the combined contraceptive pill should not be started before 3 weeks post delivery but is considered safe from 6 weeks. Prescribing the COCP early postpartum between 3-6 weeks postdelivery, requires discussion of individualised risks and benefits.**

As Alina has a past history of VTE she should not be prescribed estrogen containing contraception due to unacceptable health risk, MEC 4, regardless of time since delivery or breastfeeding.

See the [UK Faculty of Sexual and Reproductive Health Contraception after pregnancy guidelines](#) for more information.

**Question: What are the options for progesterone-only contraception postpartum and when can they be commenced after delivery?**

Progestins have not been shown to increase the risk of VTE in the puerperium, even in the context of additional risk factors, hence current contraceptive guidelines state they can be started immediately post delivery. Progesterone only pills and the progesterone-implant (Implanon) and depot injection are all considered MEC 1 or 2 i.e. the benefits likely outweigh any risks. Studies have not shown any adverse effects of any type of progesterone contraception on establishing breastfeeding or infant growth and well-being<sup>iii</sup>, so they can be used regardless of intention to breastfeed. This has led to many hospital maternity units now providing access to Implanon insertion prior to leaving hospital for those women who choose this option.

**Answer: Progesterone-only contraception can be commenced at anytime after delivery regardless of breastfeeding.**

*Remember: if it is more than 3 weeks post delivery if not breast-feeding and more than 6 weeks if breastfeeding, then the possibility of pregnancy must be considered before starting the contraceptive method and the QuickStart protocol should be used.*

#### **QUICKSTARTING ORAL CONTRACEPTION:**

The Quick Start method means starting the pill on the day it is prescribed if the user is unlikely to be pregnant already. A back-up form of birth control (eg, condoms) is needed for the first seven days after the Quick Start and a pregnancy test should be performed 4 weeks later to ensure an early pregnancy was not missed.

Alina has read up about the Implant but prefers to use an oral contraceptive option. She recalls being prescribed the progesterone-only pill (POP “Minipill”) after her first delivery but she never took it as it was too hard to remember to take within a 3 hour window each day!

**Question: Is the new drospirinone -POP (Slinda®) suitable for postnatal contraception and how should it be taken?**

There have not been large numbers of studies looking at the use of drospirinone at higher doses in breastfeeding but the studies that have been done are reassuring with 0.1% of the maternal dose reaching the baby’s circulation<sup>iv</sup> There are very few contra-indications to progesterone only contraception, but importantly it should not be used if there is current or past breast cancer,

decompensated liver disease or liver tumour. Contraceptive effect can be reduced by medications which induce liver-enzymes, including St Johns Wort and several anti-epileptic agents. ( this is the same for the COCP)

The big advantage of new drospirinone -POP (Slinda®) is that it reliably suppresses ovulation, like the COCP and so it has similar effectiveness at preventing pregnancy, around 98%, which is significantly higher than the older POP/ "Mini-pills", around 92-94%. It also means that Slinda® has the same pill-taking rules as COCPs, with a 24 hour window to take a pill each day, rather than the 3- hour window of the Mini-pills. However, if more than 24 hours has passed since a pill was taken it is considered a missed pill and additional contraception or abstinence for 7 days is required and, if unprotected sex has occurred since the pill was missed, then emergency contraception is advised.

Slinda is packaged as a 24/4 regimen, which means there are 24 hormone/active pills and 4 placebo/inactive pills. Many people experience some breakthrough bleeding in the first 1- 2 cycles, so this needs to be forewarned as it usually settles. Sometimes withdrawal bleeds can become very light or absent over time with the drospirinone-POP. If pregnancy is excluded, then this is not a concern. Similar effects can be seen with the norethisterone containing COCP and reflects that the endometrium is atrophic due to the progesterone-effect.

**Answer: Drospirinone-POP (Slinda) can be started anytime post delivery regardless of breastfeeding and VTE risk.**

As you can see there is quite a bit to discuss with Alina regarding her contraceptive choices and it may take a couple of discussions over several antenatal appointments to enable her to decide upon her preferred course of action!

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<sup>i</sup> Grandi G, Napolitano A, Cagnacci A. Metabolic impact of combined hormonal contraceptives containing estradiol. *Expert Opin Drug Metab Toxicol*. 2016; **12**(7): 779-787. doi:[10.1080/17425255.2016.1190832](https://doi.org/10.1080/17425255.2016.1190832)

<sup>ii</sup> Grandi G, Del Savio MC, Tassi A, Facchinetti F. Postpartum contraception: A matter of guidelines. *Int J Gynecol Obstet*. 2024; 164: 56-65. doi:[10.1002/ijgo.14928](https://doi.org/10.1002/ijgo.14928)

<sup>iii</sup> Phillips SJ, Tepper NK, Kapp N, Nanda K, Temmerman M, Curtis KM. Progestogen-only contraceptive use among breastfeeding women: a systematic review. *Contraception*. 2016; **94**(3): 226-252. doi:[10.1016/j.contraception.2015.09.010](https://doi.org/10.1016/j.contraception.2015.09.010)

<sup>iv</sup> Melka D, Kask K, Colli E, Regidor PA. A single-arm study to evaluate the transfer of drospirenone to breast milk after reaching steady state, following oral administration of 4 mg drospirenone in healthy lactating female volunteers. *Womens Health (Lond)*. 2020; **16**:1745506520957192. doi:[10.1177/1745506520957192](https://doi.org/10.1177/1745506520957192)